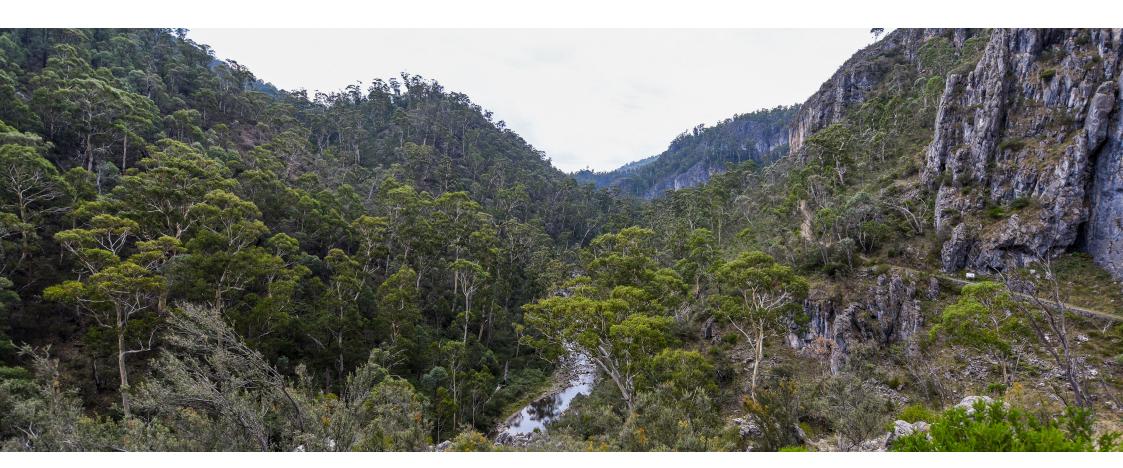


Precinct Planning Kosciuszko National Park

Draft Yarrangobilly Caves Precinct Plan | June 2021



NPWS acknowledges the traditional owners of the land at and surrounding this precinct in the traditional Country of the Bidewal, Ngarigo, Wolgolu, Ngunawal and Wiradjari People and pays its respects to elders past, present and future.

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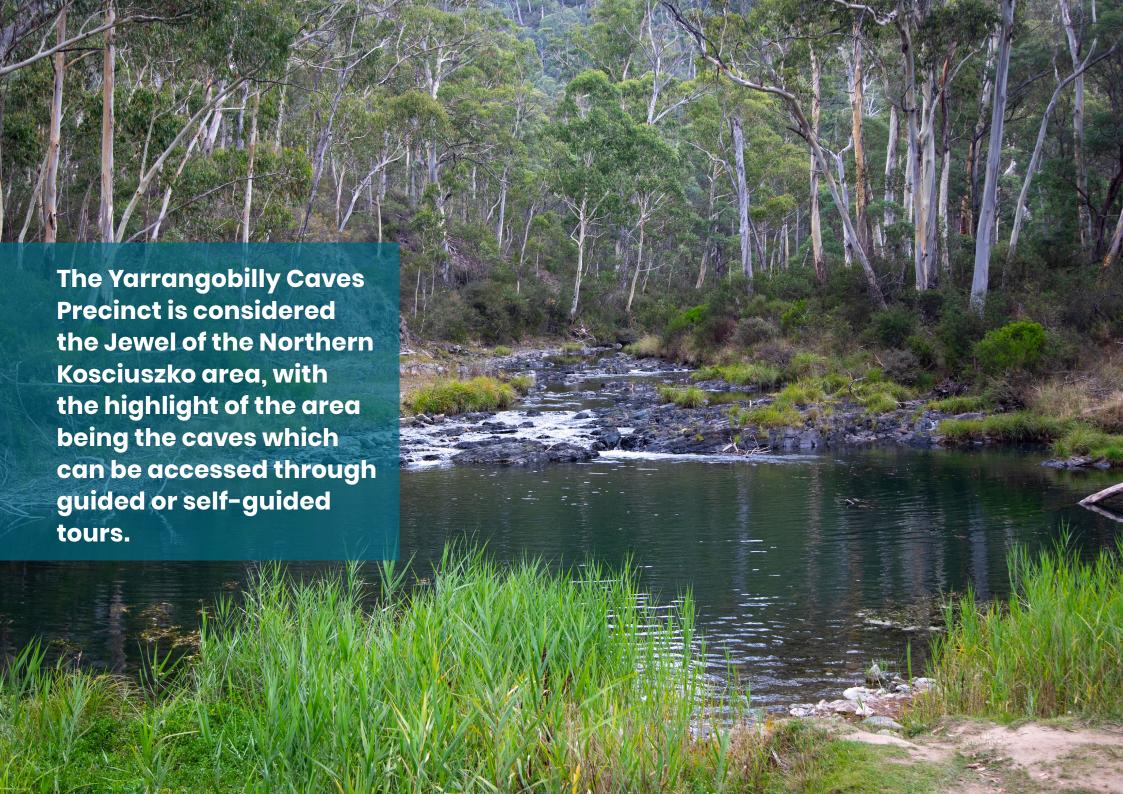
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Introduction

Background

JPW, SGS Economics and WT Partnership have been engaged by NPWS to develop precinct plans for The Yarrangobilly Caves.

This precinct plan covers includes deliverables outlined within the scope of services for the project including;

- Site analysis
- Site values
- Activity package describing proposed visitor experiences, activities and facilities which includes;
 - Design capacities
 - Accommodation opportunities
 - New visitor facility opportunities
 - New visitor products/experiences
- Visitation analysis, current and potential markets and visitor capacities
- Initial proposals for new or enhanced visitor services/ experiences and capital infrastructure development
- Facilities and Infrastructure Masterplan including;
 - Opportunities for upgrading or restoring existing facilities
 - Development of an infrastructure lifecycle plan with schedule of replacement and estimated cost

- Development of a capital infrastructure plan
- Cave and Cave tour assessment

The Brief

National Parks and Wildlife Service has outlined several overarching requirements to be targeted in the precinct plans which include;

- Enhancing visitor experiences
- Protect and conserve the site's natural and cultural heritage values
- Increase visitation across the year
- Broaden revenue streams
- Increase revenue and maximise net revenue
- Increase, develop and maximise regional tourism/ commercial partnerships
- Improve efficiency of managing and maintaining the sites

Detailed brief outlines which relate to each specific site will be discussed within relevant sections of this report.

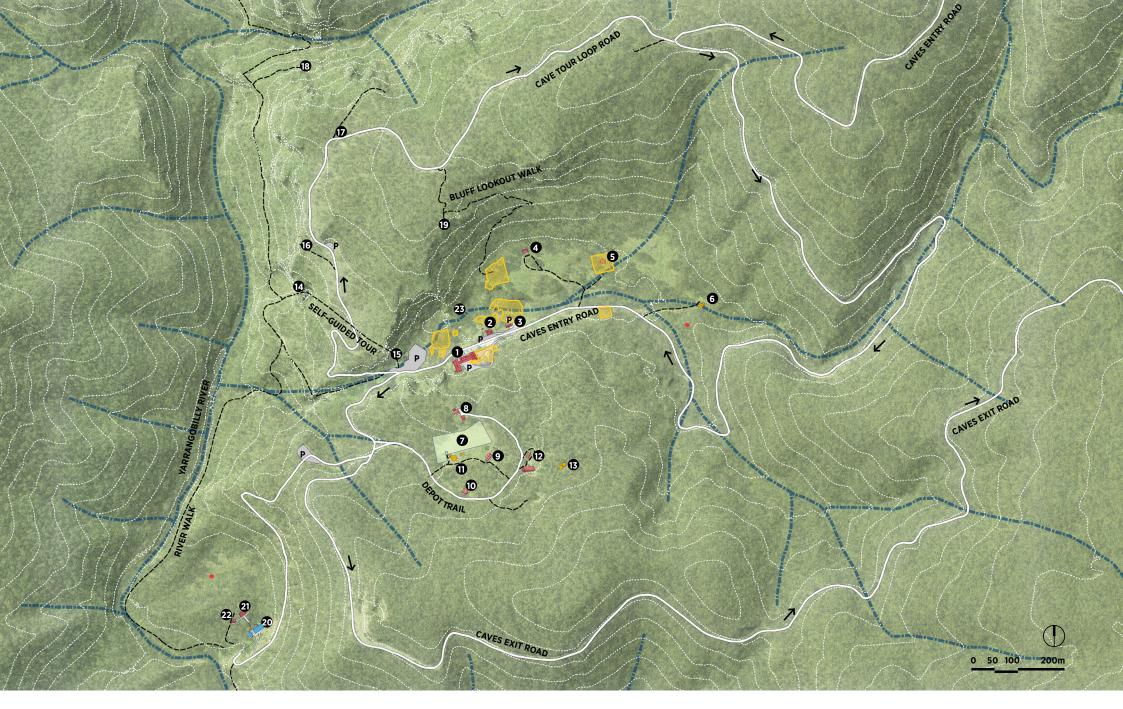


Figure 1.1 Yarrangobilly Caves Existing Site Plan (JPW)

Yarrangobilly Caves Precinct Site Analysis

Yarrangobilly Caves Precinct Overview

The Yarrangobilly Caves Precinct is considered the Jewel of the Northern Kosciuszko area, with the highlight of the area being the caves which can be accessed through guided or self-guided tours. The area also offers visitors many options for bush-walks, thermal pool swimming, picnics, fishing, birdwatching and Aboriginal cultural and nature play programs.

The precinct is an ideal location for visitors to base themselves to access and explore other North KNP visitor experiences.

The Brief & Current Issues

As the highlight of the Northern Kosciuszko National Park, the precinct is becoming increasingly popular with tourists and is often operating at maximum capacity.

The site gets extremely busy on long weekends, during school holidays and in winter when skiing and snowplay activites are undertaken at the nearby Mt Selwyn. The master plan will need to consider how the site can function more effectively and create a more premium visitor experience. Currently, site issues that have been discussed with NPWS and will be explored in the Precinct Plans include:

 The Visitor Information Centre currently serves as a multi-purpose building. Ticket sales, tourist information, gift shop, kiosk and staff office currently operate out of the one small building. On busy weekends this can result in long waits for visitors.

- The entrance to the precinct is not clearly defined
- Parking can be an issue and operates beyond capacity. Staff are required to usher vehicles to inappropriate "overflow" sites in busy periods
- Electricity supply currently limits the number of accommodation options. All power is generated on-site through either hydro-electric power or a backup diesel generator. (Solar has been investigated but isn't currently an option due to reduced sunlight hours within the valley)
- A lack of defined materials palette may result in the use of new materials that are not sensitive to the heritage site
- The interpretation and signage in the precinct is damaged or dated, and does not present to a high standard
- Staff are required to travel long distances to get to work. Limited cheap accommodation options are currently available on site
- Remoteness can create management issues;
 Currently, laundry from rooms in the Caves
 House travels to Albury for cleaning regularly at a cost of \$8 per room
- Access to the thermal pool area can be challenging for some guests. The road down to the pool is steep and slippery. Entering and exiting the pool can also create issues, as there is no stepped or ramped access

- 1. Yarrangobilly Caves House
- 2. Visitor Information Centre
- 3. Toilet block
- 4. Kitchen block
- 5. Shelter
- 6. Power plant
- 7. Nursery
- 8. Guide's house
- 9. Manager's house
- 10. Lyrebird cottage
- 11. On-site sewage treatment plant
- 12. Workshop & Storage
- 13. Hydraulic tanks
- 14. South Glory Cave Entry
- 15. South Glory Cave Exit
- 16. Jersey Cave
- 17. Jillabenan Cave
- 18. Harrie Wood Cave
- 19. Bluff Lookout
- 20. Thermal Pool
- 21. Change room
- 22. Toilet block
- 23. Archaeology Weather Station ruin
- Aboriginal Artefact
- European Archaeological sensitivity area
- P Car park
- One way road

 Lack of external communication creates a high risk situation in the pool area if a visitor is injured.

NPWS also discussed with the JPW team the desire for the following options to be explored in the Precinct Plans:

- New cabins or semi-permanent accommodation options. These should be higher end, and not include camping in this precinct.
- A new Visitor Information Centre
- The potential for a new café or dining area, or the potential for the existing Visitor Information Centre to be adapted
- Additional car parking option
- More self-contained 3 bedroom accommodation, similar to Lyrebird Cottage, and exploring best options for staff accommodation
- Options to upgrade the thermal pool area, including access, shade, landscaping, communication and entry and exit from the pool
- Options for upgrading the interiors of the 1901 Caves House wings to a standard similar to the 1917 section
- · Addition of snow based activities
- A review of general site access and visitor flow.

Points of distinction

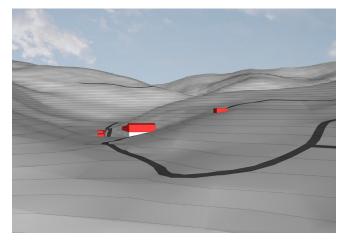
- Exceptional tourist attraction with guided and self-guided cave tours
- Unique Kosciuszko natural features
- Karst landscape
- Heritage story
- Wolgalu cultural connections
- Immersion in natural environment
- Thermal pool
- Capable of accommodating large groups
- Sustainability; All power supplied by onsite hydro generator, backed up by diesel generator when water levels are low.

Current activities

- Hiking
- Cave tours
- Mountain bike riding
- Kids educational programs
- 30 min drive to Mt Selwyn ski fields
- Cave tours
- Swimming
- Adventure Caving
- Recreational Caving.



Looking towards the Caves House from Bluff Lookout Yarrangobilly Caves (JPW)



Yarrangobilly Caves topographical diagram (JPW)

Site Overview

The Site

The Yarrangobilly Caves are located in the northern part of Kosciuszko National Park and are accessed via a 5.3 km dirt and bitumen road from the turn-off on the Snowy Mountains Highway. The road is in reasonable condition and is suitable to 2WD vehicles, and vehicles up to a maximum length of 12m.

The Caves Entrance and Exit roads to the Yarrangobilly precinct are owned and managed by Transport for NSW, and the Cave Access Trail which completes the one way loop of the site, is owned and maintained by NPWS. All other roads are managed by NPWS.

Yarrangobilly is 77km from Tumut and 116km from Cooma.

Access to the precinct is open year round, with snow chains compulsory for 2WD vehicles by law in winter months.

Topography & Landscape features

The Yarrangobilly Precinct includes the Snowy Mountains Highway, Yarrangobilly River, Kiandra and Yarrangobilly Caves. It is characterised by mountainous country with steep slopes, V shaped valleys and narrow stream valleys with small floodplains. Small open flat areas are found below 1000m altitude.

The Yarrangobilly Caves House Precinct is an area of approximately six square kilometres located between the Snowy Mountains Highway and the Yarrangobilly River, south of Tumut and west of Adaminaby and Cooma

The precinct is characterised by important karst geology which forms a north-south belt, 12km in length and 1 km wide. This karst area includes a full range of caves, dolines and areas of disrupted drainage. There are up to 400 known caves in the area, 4 of which have been developed as tourism show caves.

Climate

The Yarrangobilly area has an annual precipitation of approximately 1300mm with a pronounced winter peak. The driest period is mid-late summer. This can have an impact on hydroelectric power generation when water levels in the Rules Creek drop, increasing dependence on the diesel generator.

Vegetation & Soils

Eight vegetation types have been identified in the Yarrangobilly precinct, four of which occur in the Yarrangobilly Caves House Precinct;

- Dry Sclerophyll Forest dominated by Red Stringybark (E. macrorhyncha) and Western Scribbly Gum (E. rossii)
- Wet Sclerophyll Forest dominated by Brown Barrel (E. fastigata) and Ribbon Gum (E. viminalis)
- Montane Sclerophyll Forest dominated by Mountain Gum (E. dalrympleana) and Alpine Ash (E. delegatensis)
- Montane Sclerophyll Forest of Alpine Ash.

Soils associated with Yarrangobilly Limestone are calcareous, red or brown clay loams. Soils are typically shallow, with rapid infiltration of surface water and of moderate to high erosion potential.

Aboriginal Occupation

The Wolgalu are the traditional owners of the land where the caves lie. Although there is no conclusive evidence of how the Wolgalu used the caves before colonisation, Aboriginal people occupied the wider Snowy Mountain region for ceremonial gatherings, including hunting for Bogong Moths.

Surface scatters of stone artefacts have been found at various locations within the precinct. The most favourable locations for Aboriginal sites have been disturbed, probably on a number of occasions, by European activities. Other than early reports of bone material from an unknown cave (almost certainly from the Glory system) no other evidence of Aboriginal use of the caves is known.

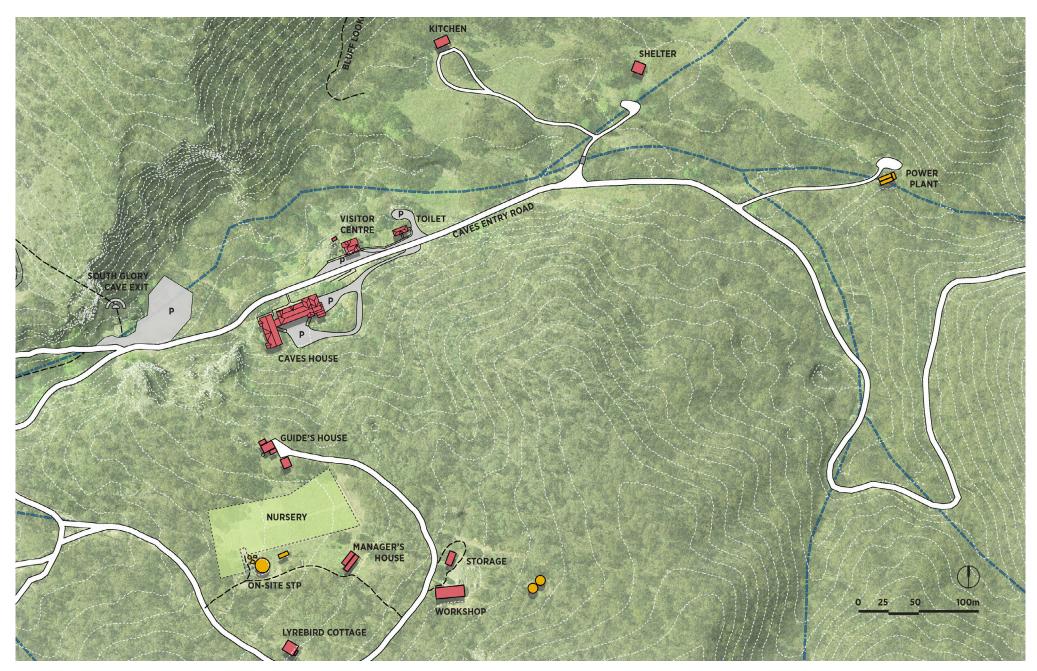


Figure 1.2 Yarrangobilly Caves Existing Detail Site Plan (JPW)

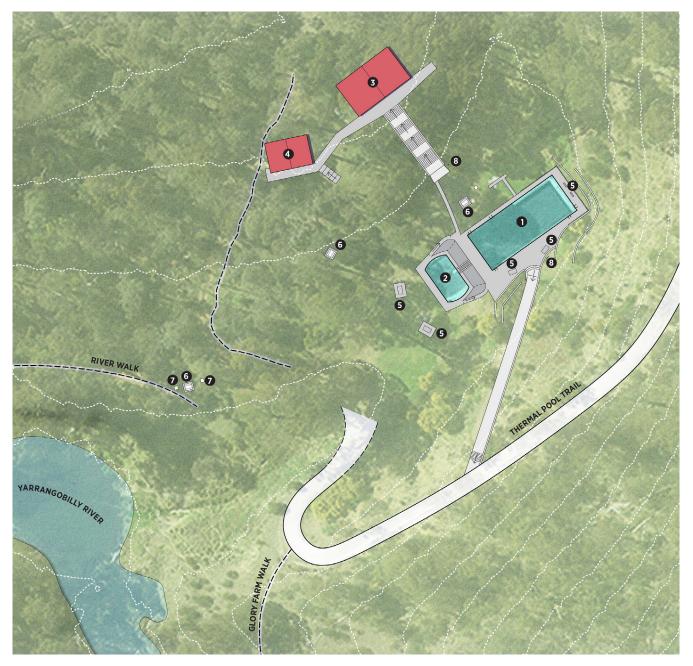


Figure 1.3 Thermal Pool Existing Detail Plan (JPW)



Thermal Pool and children's wading pool (JPW)

- 1. Thermal Pool
- 2. Children's wading pool
- 3. Change Room
- 4. Toilet
- 5. Seat
- 6. Picnic table
- 7. *BBQ*
- 8. Sign







- 1. Kitchen 1901 wings, Caves House (JPW)
- 2. Private suite, 1917 section Caves House (JPW)
- 3. Example of retained heritage elements 1917 section (JPW)

Site Assets & Current Condition

Caves House

Caves House is a significant intact example of early twentieth-century resort style development.

The house is divided into two sections, a 1901 single story building with an East and West wing, and a two storey building completed in 1917.

Facilities in the Caves House include barbecue, kitchens, both en suite and shared bathrooms, toilets and electric power.

The 1901 wings were refurbished and opened for accommodation in 2008, while the 1917 section was re-opened in April 2014.

Current Condition:

After the recent refurbishment of both buildings of the Caves House, it is currently in excellent condition. The 1917 building presents to a high standard, with modern bathrooms and kitchen facilities. Interesting heritage features have been retained in a sensitive way, while new furniture elements are robust and easily maintained. No upgrades would be recommended to this wing.

The earlier refurbishment of the 1901 building has retained more heritage elements through colour palette and furniture selection, although bathrooms and kitchens are more dated. This building could easily be refurbished to a standard similar to the 1917 side.

Visitor Information Centre

The Visitor Information Centre was originally the manager's cottage and is not fit for purpose. The Visitor Information Centre is operating beyond capacity, and is outdated. It is required to perform too many functions within a relatively tight space.

Visitor Information Centre Toilet Block

The toilet block is a newer addition to the site, and is easily accessed from both Visitor Information Centre and the car park. It is relatively new and in good condition.

Lyrebird Cottage

The Lyrebird Cottage is a modular eco-cottage. It is fully furnished and has a full kitchen and bathroom with separate toilet. The cottage uses hydro electricity and diesel power, with a gas heater in the living room and electric heater in each bedroom. Whilst the cottage was established on site almost a decade ago, the overall condition is excellent.

Thermal Pool

A small section of paved pathway is being added. The pool, change rooms and surrounds are in fair condition but feel dated. The water quality of the thermal pool itself is excellent.







- 1. Guide's House Entry Area (JPW)
- 2. Power house (JPW)
- 3. Front deck of Lyrebird Cottage (JPW)

Site Assets & Current Condition

Guide's House

Guide's house is currently being used for temporary staff accommodation. The interior is very simply furnished and has power and water access. It is also one of the few cottages with a satellite dish installed. The cottage location is excellent, with views overlooking the Caves House.

Manager's House

The house is used for accommodation by Caves management staff. The house has full access to electricity and water. It has air conditioning and satellite dish. There is also an electric hot water system inside the building.

On-site Sewage Treatment Plant

The Caves precinct is self-sufficient with sewage treatment on site. The treatment plant facilities are fairly new and in excellent condition.

Nursery

The nursery utilises recycled on-site sewage treatment to water Snow Grasses and other plants. It has a simple layout and has protective fencing around its perimeter. The farm is regularly managed and maintained by NPWS staff. The harvested seeds are used within the National Park.

Northern Shelter

The northern picnic shelter is in good condition. It has access to electricity, water and gas BBQ, and is furnished with large picnic tables. The space and facilities are very generous for use by large group guests.

Northern Kitchen Block

The kitchen block currently is underutilised. Although it has access to both electricity and water, the interior equipment and facilities are minimal (3 picnic tables and 2 BBQ). The kitchen block is not welcoming or connected to the rest of the area as it is enclosed with only high windows (as an adaptation of previous toilet block).

Power house

The power house generates electricity for the entire Caves Precinct. It has a hydro-electric generator as the main source of energy and diesel generator as backup during dry seasons. There is a relatively new 9000 litres diesel tank installed adjacent to the power house. Two new energy efficient and quiet generators have been installed to replace the two decommissioned generators to minimuse noise from the area.

Moving the generators could be investigated as an option, as the diesel fumes are an issue if the generator is located close to a potential new cabin site.

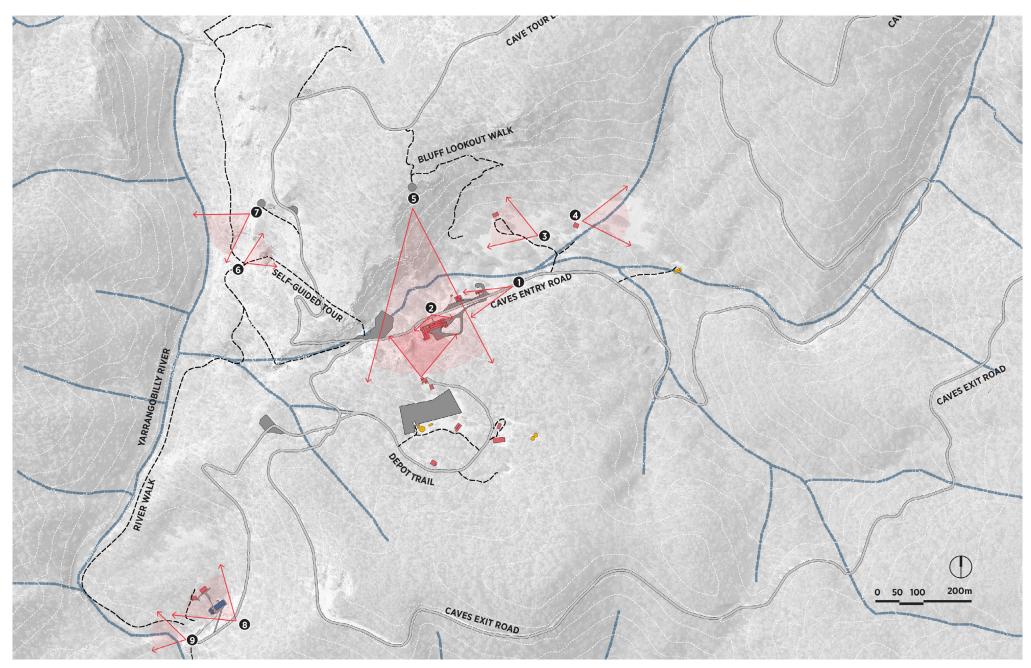


Figure 1.4 Key View Points Plan



















- 1. View towards main precinct buildings (JPW)
- 2. View from Caves Entry Road towards Yarrangobilly Caves House (JPW)
- 3. View from shelter towards kitchen block (JPW)
- 4. View from Shelter towards open space on the east side (JPW)
- 5. View from Bluff Lookout towards Yarrangobilly Caves House (JPW)
- 6. View towards South Glory Caves Entry (JPW)
- 7. View from Jersey Cave towards Yarrangobilly River (JPW)
- 8. View from Thermal Pool Trail towards Thermal Pool (JPW)
- 9. View towards Yarrangobilly River (JPW)

Natural, Cultural & Heritage Values

Natural Values

- The Yarrangobilly karst area includes an extensive complex of limestone caves and a number of karst features including caves, sink holes, dolines and underground streams
- Soil and geological features in the area provide scientific evidence of deep oceanic basins
- There is a diverse range of fauna species known to be present, and several rare and threatened species associated with the karst landscape.

Cultural Values

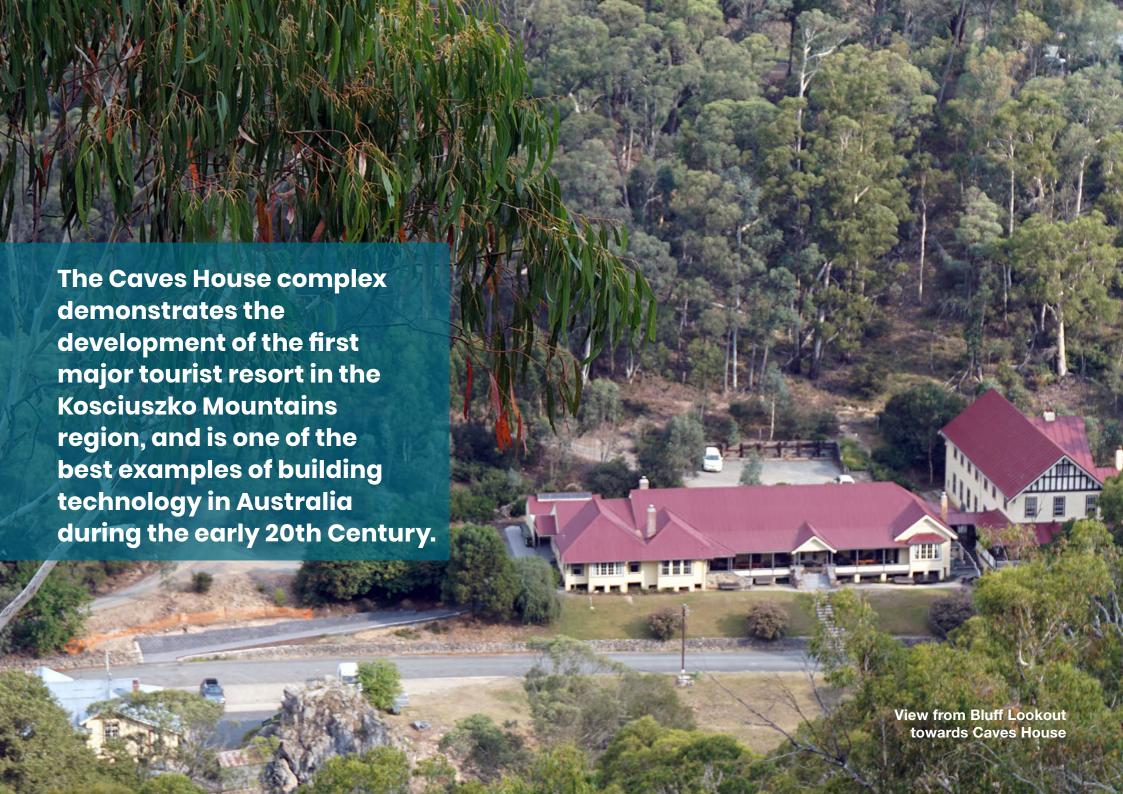
- Significance to the Wolgalu people, the traditional owners of the land where the caves lie.
- The development of Yarrangobilly was the result of the emergence of the romantic Grand Tour, and a world-wide trend associated with the exploration of cave systems in 19th century
- Strong association with Oliver Trickett who is recognised as the father of speleology in NSW
- Good representative example of romanticised Federation Arts and Crafts architectural style.

Heritage Values

- The Caves House complex demonstrates the development of the first major tourist resort in the Kosciuszko Mountains region, and is one of the best examples of building technology in Australia during the early 20th Century.
- The area demonstrates the evolving pattern of Aboriginal culture, occupation and adaptation history
- The heritage trees in the picnic area and nearby demonstrate the early 1900's European development and demonstrate the involvement of the Royal Botanic Garden, in establishment of exotic trees in rural New South Wales during the same time period.



Limestone cliff of karst landscape Yarrangobilly Precinct (JPW)



Proposed masterplan

- 1. New site for Eco Pods (5)
- 2. BBQ shelter to be demolished
- 3. New road to Eco Pods
- 4. Two new diesel generators (potentially relocate)
- 5. New parking area for day use picnics
- 6. New picnic shelters, tables and seating (5)
- 7. New picnic shelter with BBQs and toilet block and undercover interpretation area
- 8. New pedestrian footpath to day use picnic area
- 9. Extend existing Bluff Lookout trail to connect to new picnic area trail
- 10. Upgrade trail to Bluff Lookout trail for easier access
- 11. Precinct entry signage
- 12. New directional signage
- 13. New Visitor Information Centre, toilet to be included

- 14. Upgrade parking area behind new Visitor Information Centre
- 15. Convert existing Visitor Information Centre to cafe with outdoor seating and upgrade parking area
- 16. Cultural Heritage Walking Trail
- 17. Refurbish 1901 wings of Caves House to bring to standard of 1917 section
- 18. New tree top walk from accommodation sites to Caves House
- 19. Demolish Guide's House and add new 3 bedroom cottage
- 20. New 3 bedroom cottage (2)
- 21. New path to 2 bedroom cottages
- 22. New 2 bedroom cottage (6)
- 23. Lyrebird Cottage
- 24. Refurbished NPWS Manager's Cottage for staff accommodation
- 25. New staff accommodation, 3 bedroom cottage
- 26. New picnic and interpretation shelter

- 27. Cottage walk to possible lookout points (location subject to NPWS)
- 28. Eco Pods Walk (location subject to NPWS)
- 29. Waste transfer station

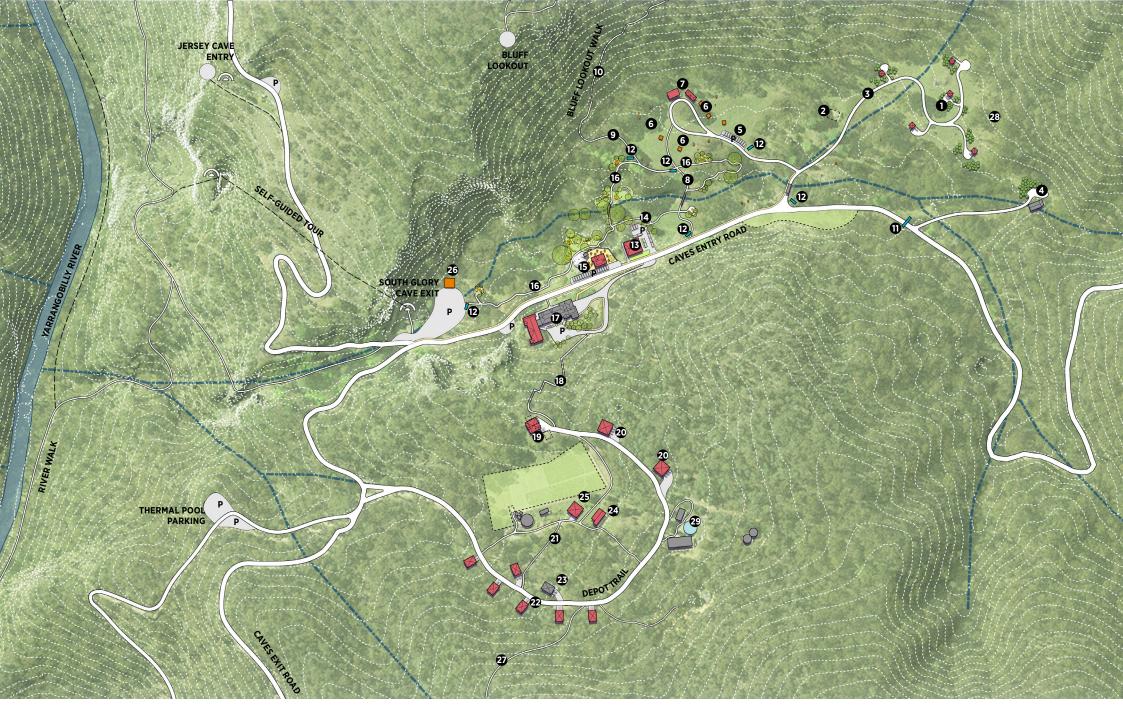


Figure 2.1 Proposed Precinct Masterplan (JPW)









- Top two images, Rolling Huts, Methow Valley, Washington.
- 2. Lower two images, WABI Cabins.









- Top two images, Hotel Endemico, Wine Country, Mexico.
- 2. Lower two images, Nomad Pods.

Accommodation Precedents

Rolling Huts, Methow Valley, Washington

- Modern modular furniture
- Flexible indoor configuration for 2 people
- Shower and toilets located in nearby barn
- Refrigerator, microwave, coffee machine and Wi-Fi
- Corner shop and on-site restaurant

WABI Cabins and Villas

- Prefabricated cabin design
- Designed to comply with BCA standards
- Variety of cabin sizes

Hotel Endemico, Wine Country, Mexico

- Outdoor nature and modern comforts at the same time
- Elevated to avoid impacting land
- Swimming pool
- Luxury interior decoration
- Landline and Wi-Fi

Nomad Pods - JAWS Architect & Parks Victoria, Melbourne

- Easily transported on trailers
- Fully self-sufficient
- Indoor toilet and shower
- Basic kitchenette

Accommodation Opportunities

Additional accommodation has been developed based on options outlined in the site analysis document.

5 x 1 Bedroom Eco Pods

5 one bedroom Eco Pods are proposed in the relatively flat area north of the Caves Entry Road. The space allowed for includes area for parking next to the pods, self-contained en-suite and kitchens and dedicated solar panels. Additional planting has been proposed in strategic locations around the cabins to ensure each site remains as private and secluded as possible.

A number of options are readily available on the market for sustainable pre-fabricated cabins, however the design of the cabins must comply requirements of Planning for Bush Fire Protection 2019 and AS3959 – 2009, and be designed to suit the cold climate of the precinct.

The design of the cabins could be modelled on the existing Lyrebird Cottage, with steel sandwich panels, and must be easily transported and constructed. The cabin fit-out must be consistent across the precinct, to provide guests the same level of accommodation experience.

6 x 2 Bedroom cottages

Six new 2 bedroom cottages are proposed around the existing Lyrebird Cottage, to extend the self-catered accommodation offering to larger groups or families.

Space has been allowed for 2 parking spaces per cabin, and cabins should contain kitchen, bathroom and living space.

Additional pathways have also been added in this area to allow guests to walk from the existing Lyrebird area past the nursery and staff cottage to then descend down towards the Caves House via a treetop or board-walk connection with steps and handrails.

Localised clearing of bushland would be required for the construction of each cottage, but the higher density of vegetation in this area can be used to create private 'pockets' for each of the new cabins.

Staff accommodation options

In addition to upgrading the existing Manager's Cottage (3 bedrooms, shared kitchen and bathroom) an additional new 3 bedroom building for staff has been proposed.

The new staff buildings will including 3 beds, a kitchen, bathroom and lounge area.

In total this would bring staff accommodation options to 6 bedrooms.

The proposed new buildings are situated around the existing Manager's Cottage and nursery area.

3 x 3 Bedroom cottage

Three new 3 bedroom cottages are proposed in the masterplan. One cottage will be located in the site of the existing Guide's House, which will be demolished. The remaining two will be located along the northern end of the depot trail.

This site of the existing Guide's House has excellent views towards the Caves House and is an ideal location for a larger, more premium guest accommodation offering.

Туре	Proposed no.	Location	No. of beds	Max no. of guests (total)	Target audience	Requirements/ notes	
Eco Pods	5	Flat clearing between power house and existing picnic shelter	1	10	Adult couple, single travellers, friends & relatives without children	Cleaning and linen per stay, power could be potentially self sufficient with off the grid options or connection to existing hydro supply, water and sewage, clearing of sites (quite dense vegetation)	
2 bed cottage	6	South of Lyrebird Cottage/ depot trail	2	24	Family group, friend groups, conference groups, sport/community groups		
3 bed cottage	3	Replace Guide's House and two new sites along depot road	3	18	Family groups, friends and relatives, premium offering at guides house site.		
Caves House 1917 section*	1	Current location	13	24	Family groups, Friends and relatives with children, Non sport community groups, Sporting groups, Business associates	No change	
Caves House 1901 wings*	1	Current location	11	14	Family groups, Friends and relatives with children, Non sport community groups, Sporting groups, Business associates		
Lyrebird Cottage*	1	Current location	3	4	Family groups, friends and relatives, sport/community groups	No change	
Total beds/ guests				94			

Table 2.1 Summary of guest accommodation options

Notes: * No change to existing numbers

Туре	Proposed no.	Location	No. of beds	Max no. of staff	Requirements/ notes
Existing Manager's House*	1	Current location	3	3	Renovate existing house and increase footprint
3 bed cottage	1	Near existing Manager's House	3	3	New cottage, power, water & sewage connection
Total beds/ guests				6	

Table 2.2 Summary of staff accommodation options

Notes: * No change to existing numbers

Summary of accommodation options

With the addition of five Eco Pods, six 2 bedroom cottages and three 3 bedroom cottages, the maximum number of guests is increased from 42 to 94.

Although there will be a reduction in staff beds from 7 existing beds in the guides and managers house to 6, the refurbmishment of the managers house and addition of new staff cottage will provide a better quality of accommodation for the staff overall.

Note:

The Master Plan/Precinct Plan is conceptual and proposes a range of future developments that would require detailed design and environmental assessments. All development is subject to permissibility under the Kosciuszko National Park Plan of Management. During the detailed design phase, Master Plan/Precinct Plan proposals will be subject to rigorous environmental and heritage impact assessment and approvals prior to works commencing. This includes assessment under the NSW Environmental Planning and Assessment Act 1979 and the NSW Heritage Act 1977.



Figure 2.2 Preliminary plan for upgrades to Caves House 1901 wings (JPW)

Room	Proposed upgrades to match Caves House 1917 section
Guest Kitchen A	New cabinets New bench-tops New gas stoves New floor finish
Guest Kitchen B	New cabinets New bench-tops New floor finish
Lounge Room	New couch New rug New curtains Fix and repaint ceiling
Hall & Corridor	Improve noise isolation between corridor and bedrooms
Conference/ Function room	AV facilities (wifi, screen, data projector, PA)
General	Repaint all rooms internally

 Table 2.3 Caves House 1901 Wing proposed upgrades



Guest kitchen Caves House 1917 section



Lounge room Caves House 1917 section



Figure 2.3 Visitor Information Centre Option 1 (JPW)

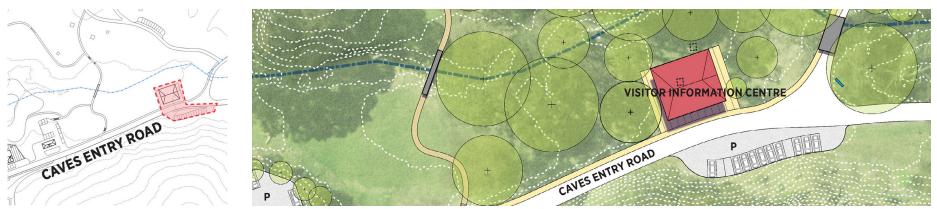


Figure 2.4 Visitor Information Centre Option 2 (JPW)

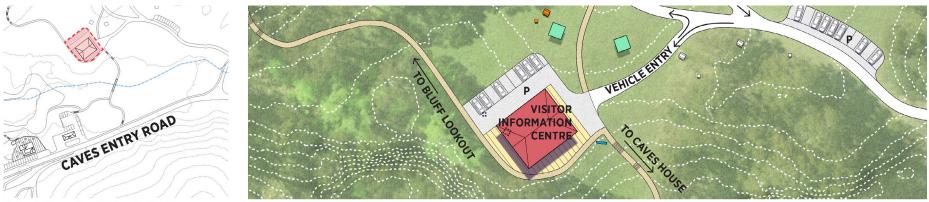


Figure 2.5 Visitor Information Centre Option 3 (JPW)

New Visitor Facility Opportunities

Visitor Information Centre

The existing Visitor Information Centre is operating beyond capacity and a new solution and site is required. The new building will include staff offices, interpretation, ticketing, information and toilets.

3 options have been reviewed for the potential location of the new Visitor Information Centre.

 Option 1 relocates the existing toilet block to the day use picnic area to utilise the space for the new Visitor Information Centre and parking. This would have the advantage of a small number of parking spaces directly behind the building, and close proximity to the Caves House.

The parking area is quite tight due to the steep drop to the north and east, therefore limiting parking numbers to around 8 spaces. Investigation would need to be carried out around this site for sewage tanks and other services immediately west to establish the final location of the new Visitor Information Centre. Option 1 is the preferred option.

 Option 2 is close to the Caves Entry Road and south of Rules Creek. It was discussed that this site does have flooding issues and is close to a sensitive doline geological area. This site is close to the road and would create a strong entry marker into the precinct. The flooding issues relating to this site make it a less attractive site for the new Visitor Information centre.

The existing toilets along the Caves Entry Road would remain in their current location for this option.

 Option 3 is elevated above Rules Creek and set back from the Caves Entry Road. Visitors would have a short walk of around 60m from the road to this site, although access would need to be considered across the significant level change. This site provides a nice overlook towards Rules Creek, however is more removed from the heart of the precinct (Cafe and Caves House).

The existing toilets along the Caves Entry road would remain in their current position for this option also.

• All options will directly connect with the proposed Wogalu cultural trail.



Echo Point Visitor Centre Blue Mountains National Park



Warrumbungle Visitor Centre Warrumbungle National Park



Warrumbungle Visitor Centre Warrumbungle National Park



Figure 2.6 Thermal Pool Proposed Upgrades (JPW)

Thermal Pool

The Thermal pool is a great asset to the site, and already popular with guests. The improvements to the Thermal Pool are intended to provide more usable space for a range of activities including day visitors, larger groups or health and wellbeing retreats.

Suggested upgrades include;

- Improving access down to the site by
 reviewing the material of the road to reduce
 the risk of slips and trips on rough surface.
 Geotechnical assessment and civil works
 will be required to allow the road to cater for
 shuttle buses to the pool area. Geotechnical
 assessments have been previously carried out
 in this area, and any previous assessments will
 need to be considered to cater to proposed
 bus traffic.
- Addition of shade shelters and seating, to match NPWS Park Facilities Manual across the precinct
- Improving the material detailing around the edge of the pool and pathways, and providing a shallower ledge for sitting around the pool edge. New paving could explore the use of natural rock slabs to create a more informal surround to the pool
- Irrigation to the lawn area utilising the water already flowing through the site.
- Extending pathways around the site to connect main areas
- Addition of phone link or other communication

- Upgrade of safety equipment, signage and pool fencing and develop risk strategy
- Develop natural play area in the grassed area between the river and the pool, to utilise the naturally occurring flow of overland water and create a stronger connection between the river and the pool.
 - 1. Add a ledge around the pool for sitting, approximately 450mm below top of water level, and stepped entrance to water at eastern end
 - New paving and long seating benches around pool edge. Widen existing paved area
 - 3. Long custom shade structure along northern edge of pool
 - 4. New terraced concrete seating steps to children's pool. Paved area under structure
 - 5. Realign and widen path to existing change rooms
 - New on grade accessible toilets/ change rooms
 - 7. Irrigate lawn area with thermal pool water
 - 8. New shade structures and picnic tables and BBQ facilities
 - 9. Turn around zone for bus
 - 10. Upgrade surface of thermal pool road to reduce slip risk
 - 11. Extend pathway to meet existing path
 - 12. Add handrails to existing steps
 - 13. Refurbish existing change-rooms
 - 14. Extend existing path
 - 15. Natural play area



Sitting ledge and steps to pool entry (Google images)



Nature play area (Rio Tinto Naturescape, Kings Park- Plan E)



Toilet block precedent (Lizard Lodge- McGregor Coxal)



Figure 2.7 Thermal Pool Proposed Upgrades (JPW)

Thermal Pool Onsen Hutadditional option

The thermal pool site has great potential to expand the visitor offering through the addition of onsen huts. In addition to the upgrades discussed above, an alternative option to the nature play area is to add two small 'onsen' type buildings along the edge of the river, to provide an exclusive and unique experience within the Yarrangobilly precinct.

The proposed onsens will utilise the natural thermal pool water flowing through the site, but will heat the water (which is currently around 27 degrees) with gas heaters.

The onsens will be able to be booked in advance, or could be bundled with Eco Pod packages. Use will be available throughout all season during the day or evenings.

The small pools within the onsens should utilise natural stone, and create as immersive and natural an experience as possible.

The onsen experience will be targeted towards couples or families, and can be marketed as a unique Kosciuszko experience. and the pool.

- 1. New path to onsen huts
- 2. Onsen hut
- 3. New screening landscape



Onsen hut precedent (Google images)



Onsen hut precedent (Google images)



Onsen hut precedent (Google images)



Onsen hut precedent (Google images)



Onsen hut precedent (Google images)



Onsen hut precedent (Google images)

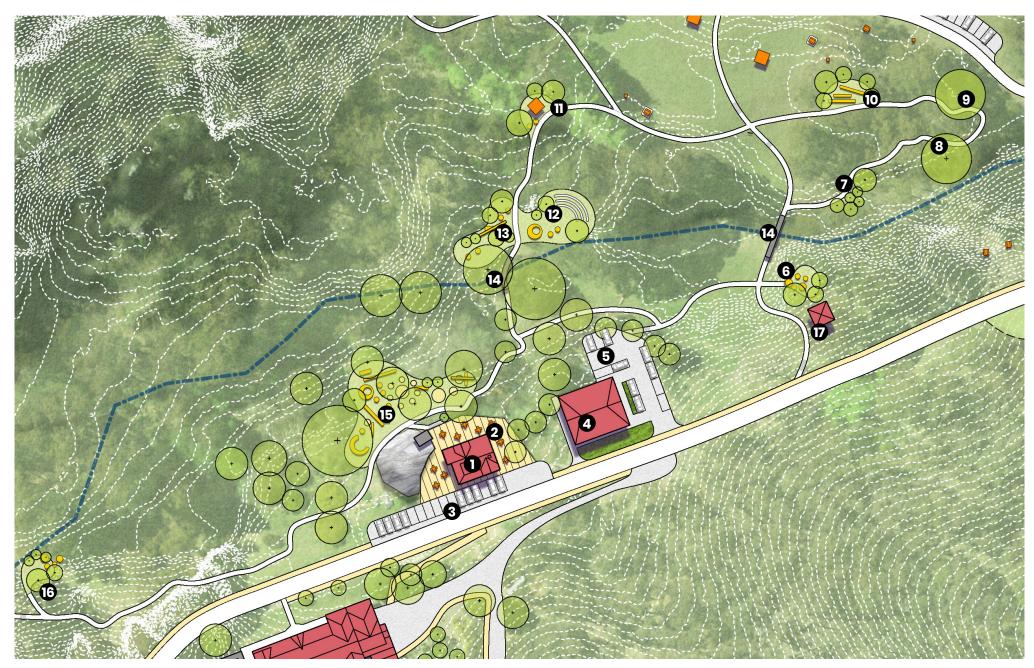


Figure 2.8 Proposed New Cafe, Visitor Information Centre and Cultural Trail (JPW)

- Convert existing Visitor Information Centre to cafe with outdoor seating
- 2. Outdoor cafe. Re-purpose existing outdoor area of Visitor Information Centre
- 3. Upgrade existing parking area
- 4. Relocated Visitor Information Centre
- Upgrade parking area behind new Visitor Information Centre
- 6. Start of new Cultural Heritage Trail
- 7. Interpretation site Edible Bush Plants
- 8. Interpretation site Canoe Tree
- 9. Interpretation site Scar Tree
- 10. Interpretation site Coolamans
- 11. Bush Shelter
- 12. Amphitheatre
- 13. Interpretation site Plant Tools
- 14. Proposed Footbridge
- 15. Interpretation site Dreamtime Story
- 16. Interpretation site Platypus Story (End of new walking track)
- 17. Storage location

Cultural Heritage Trail

The precinct plan proposes to build upon the excellent location of the existing discovery play area to expand the potential of the program, and also create a stronger connection with the proposed cafe and Rules Creek.

A new Cultural Heritage trail will begin east of the existing toilet block at Rules Creak, and meander along the creek banks with several feature locations along the way. It will include a storage area at the beginning of the trail, and dedicated spaces learning and exploration.

The trail will end at the Playtupus Story Time, and then connect into the South Glory Cave parking area to ensure guests are able to walk through the precinct away from the main road.

New directional signage and interpretative display panels will be located along this cultural heritage trail.



Opportunity to extend discovery play Oregon Parks (S Recreation)



Centenary Lakes Nature Play (Landplan Landscape Architecture)

New cafe

Currently, guests are required to supply their own food and beverage options, or are able to buy minimal supplies such as ice-cream, water, coffee and tea and limited BBQ packs in the Visitor Information Centre.

The precinct plan proposes that the existing Visitor Information Centre is re-purposed to a new cafe. Staff requirements would need to be considered, and options for delivery of products.

The cafe could also include a small general supplies store including, basic food supplies such as dry, frozen and catering goods

A kitchen garden could be created on the site to compliment the cafe and reference the 1903 gardens of the precinct where the Caves House looked over a "well-watered garden ground, where vegetables, fruit and flowers flourished in defiance of the severest drought conditions". Fencing and maintenance of the garden will need to be considered to protect from native wildlife.

The kitchen garden could also become part of an educational program relating to the early history and self-sufficient nature of the Caves House.



Figure 2.9 Proposed Day-use Picnic Area upgrade (JPW)

Day Use Picnic Area

- The existing day use picnic shelter should be demolished and rebuilt to make it more inviting for picnickers. An undercover interpretation education area should be included to provide activities in all weather conditions.
- 2. New toilet additions to avoid the longer walk back to the existing toilets closer to the Visitor Information Centre.
- 3. Five new shade and picnic table areas are proposed for the day use picnic area, to provide more protection throughout the year. Shade and picnic tables should be following NPWS Park Facilities Manual across the precinct.
- 4. Additional parking for the day use picnic area with electrical vehicle charging stations.



Potential to upgrade picnic shelter and toilet facilities (Woodgate Beach)



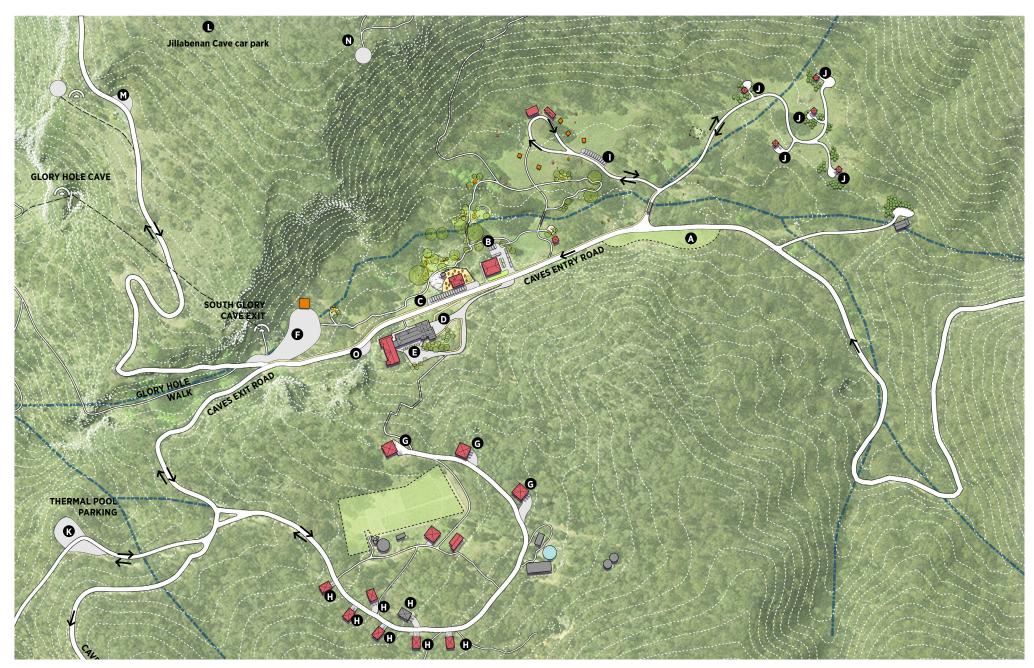


Figure 2.10 Proposed parking upgrade (JPW)

Upgraded parking options

Currently the site has both formal and informal overflow parking areas. The parking strategy has been reviewed as part of the overall precinct plan, taking into consideration projected visitor numbers and increased overnight guest numbers.

Car parking spaces have been upgraded from the current 136 day visitor spaces to 166. The increase is mainly due to the upgrade of Visitor Information Centre and new parking spaces in the day use picnic area.

With the proposed new accommodation opportunities, overnight visitor car parking is increased from 18 car spaces to 32, with an additional 1500m² overflow spaces at site A.

Road Network

The two way section of road between South Glory Cave Walk and Thermal Pool car park will need assessment for Geo-tech stability and civil assessment for line of site and width if a bus shuttle service is increased to the thermal pool, as it is currently very narrow.



Proposed overflow parking, Site A (JPW)

Table 2.4 Summary of proposed parking upgrades (Right)

Carpark	Proposed no. car spaces	Previous no. car spaces	Use	Notes
А	1500m² overflow car parking	1500m² overflow car parking	Overflow	Leave as grassed area and use as overflow car parking. Remove BBQ in the middle of space.
В	11	8	Day	Upgraded parking next to new Visitor Information Centre
С	16	12	Day	Extend existing parking in front of the new cafe
D	9	9	Night	no change
Е	9	9	Night	no change
F	40	40	Day	no change
G	9	0	Night	3 spaces per 3 bedroom cottage for guests
Н	14	2	Day	2 spaces per 2 bedroom cottage for guests
I	11	0	Day	New day use parking
J	5	0	Night	1 space per Eco Pod for guests
K	40	40	Day	no change
L	12	12	Day	no change
М	12	12	Day	no change
N	4	4	Day	no change
0	6	6	Day	no change
Existing day use car spaces	136	Existing night use car spaces	18	
Total new day use car spaces	166	Total new night use car spaces	32	

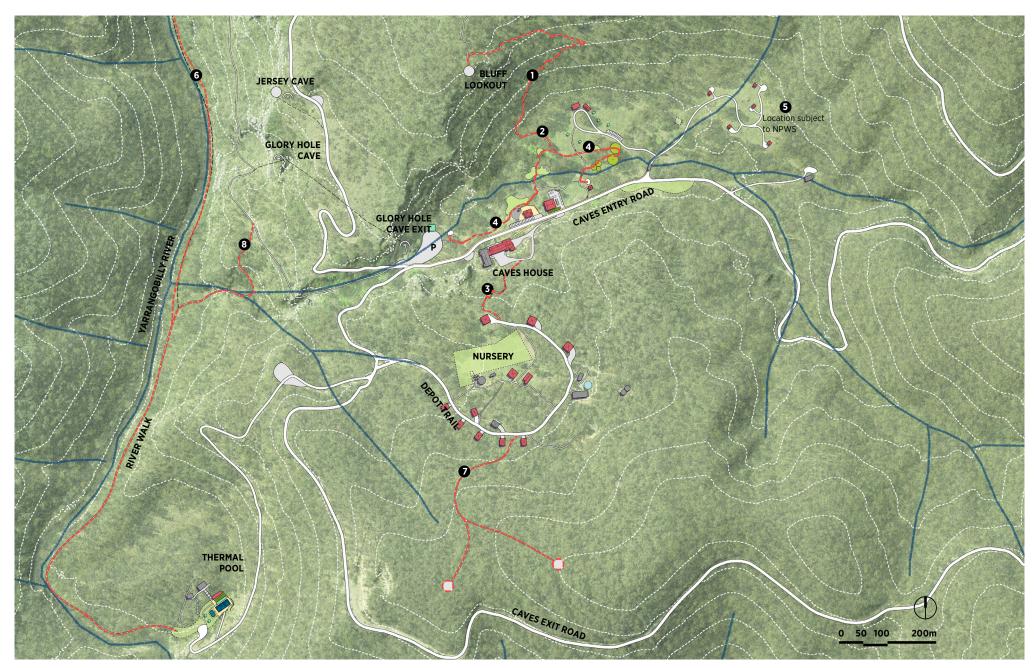


Figure 2.11 Proposed trail upgrades and extensions (JPW)

Upgraded trails

A few additional connections to the existing trail network will contribute to enhancing the visitor experience. These include;

1 & 2. Bluff Lookout

There is currently a rough track from Bluff lookout down to the Caves House. This could be upgraded with steps and handrails, or raised board-walks where necessary to improve safety and ease of access. Once down the steep gradient, the trail has been extended to connect into the day use picnic area, which then links back to the proposed Visitor Information Centre.

3. Guide's House to Caves House

A new trail is proposed to connect the 2 and 3 bedroom cottage precinct to the Caves House. The average gradient of this site is 1 in 2.7, therefore this trail would again need to be an elevated board-walk with steps and landings. Pathways have been added from the 2 bedroom cottages past the existing nursery to connect with the beginning of this trail.

4. Cultutal Heritage Walk

A new trail is proposed to link the extended discovery play area to the South Glory Cave car park, to allow guests to explore the area along the banks of Rules Creek, and reduce numbers walking along the roads.

5. Eco Pods Walk

A new short walk is proposed behind the Eco Pods to expand activity options for guests staying in this area. The new walk to be a natural surface, cleared walking route to the east of the pods area. Location of the Eco Pods Walk subject to NPWS.

Guests can wander through the bushland surrounding the Eco Pods, and take a bottle of wine or picnic to appreciate the natural surroundings away from the rest of the precinct.

6. Yarrangobilly Village to Yarrangobilly Caves hike

To give guests an option of a longer walk in the area the precinct plan proposes to extend the existing river walk to continue north along the Yarrangobilly River and join with the existing Yans Crossing Trail. This would require an additional 4.9km of new trails along Yarrangobilly River to create a 17km round trip.

7. Cottage Walk

A new trail is proposed to connect the new 2 bedroom cottage precinct to the potential lookout points at the ridgeline to the south, to allow guests to explore the area, and to enjoy the views down Yarrangobilly River.

Key	Trail	Distance of upgrades	Average gradient	Level change	Estimated no. of steps	Estimated time one way
1	Bluff Lookout upgrade of existing trail	460m	1:5.1 slope	90m	540	30-45 mins
2	Bluff lookout extension to day use picnic area	90m	1:45 path	2m	-	1-2 mins
3	Guide's house to Caves House	158m	1:5.2 slope	30m	153	5 -10 mins
4	Cultural trail	508m	1:80 path	4m	-	5-10mins
5	Eco Pods Walk	Location subject to NPWS	-	-	-	-
6	Yarrangobilly Village to Yarrangobilly Caves return	4.5km	-	-	-	2.5-4 hrs
7	Cottage Walk	475m	1:5.6 slope	65m	390	30-45 mins
8	Potential to upgrade existing trail from River Walk up to South Glory Cave	260m	1:4.7 slope	55m	-	30-45 mins

 Table 2.5
 Proposed upgrades to walking trails



Example of Pedestrian link upgrades (Google images)



Potential for upgrading interpretation displays East Point Park Bird Sanctuary Pavilion (PLANT 1)

Design Capacities

Overnight Accommodation

The suggested carrying capacity is based on a number of factors including:

- Current Caves House and Lyrebird Cottage capacity
- Additional guests accommodation
- New staff accommodation
- Proposed new facilities
- Seasonal visitation and other environmental constraints

Caves House

The proposed Yarrangobilly Precinct Plan proposes to preserve the existing Caves House layout and accommodation. Currently the 1901 section could accommodate a maximum of 14 guests, and the 1917 section could fit up-to 24 guests.

Lyrebird Cottage

The Lyrebird Cottage is a fully furnished modular cottage that can accommodate a maximum of 4 guests. It is prefabricated and easy to install on site. Since its establishment, it has been very popular among families and friends, which sets up an excellent template for additional accommodation options.

Eco Pods

The precinct plan proposes 5 prefabricated Eco Pods at the flat area between picnic shelter and the power house. Each Eco Pod has dedicated solar panels and self-contained en-suite and kitchen. It supports accommodation for single travellers and adult couples.

Prefabricated Cottages

Prefabricated Cottages allow for extra self-catered accommodation opportunities for families and groups of friends.

The precinct plan proposes a total of 9 cottages (6 two-bed cottages and 3 three-bed cottages) that could accommodate 42 guests.

Staff accommodation

The precinct plan proposes new staff accommodation. 1 new cottage is proposed along with the upgrade of existing Manager's House. This would accommodate 6 staffs total on site.

Environmental Impact

- Weather conditions during winter season may affect the proposed accommodation carrying capacities.
- Risks during bushfire season may affect the use and accommodation of certain cottages.

Operation Parameters

Proposed upgrades in the precinct plan require more staff resources in operation and management.

Designed capacity

The precinct plan proposes a total of 123% increase in overnight accommodation capacity. Caves House, Lyrebird Cottage, Eco Pods and Eco cottages could accommodate maximum 94 guests on a daily basis. Based on the target 63% occupancy, the upgrade could provide accommodation for approx. 15,970 visitor nights and approx. 8380 visitors per year, which is a 118% increase.

Type Name	Maximum no. of guests per stay	No. of beds	Target occupancy (Based on SGS Scenario 3)	Average length of stay	Total visitor nights (projection based on SGS Scenario 3)	Real carrying capacity (projection based on SGS Scenario 3)	Accommodation parking space
Yarrangobilly Precinct	94	53	63%	2.58	15,970	8380	46
Caves House 1901 wings	14	11	63%	-	2,615	1,248	6
Caves House 1917 section	24	13	63%	-	3,489	2,140	12
Lyrebird Cottage	4	3	63%	-	782	357	2
Eco Pods	10	5	63%	-	2,185	891	5
2 Bed cottage x 6	24	12	63%	-	4,139	2,140	12
3 Bed cottage x 3	18	9	63%	-	2760	1604	9
Staff Accommodation	6	6	-				
Manager's House	3	3	-	-	-	-	-
3 Bed cottage x 1	3	3	-	-	-	-	-

Table 2.6 Summary of Proposed carrying capacity - maximum guests 94 daily + 6 staff

Day trip capacities

The suggest carrying capacity is based on a number of factors including:

- Proposed facilities and upgrades
- Cave access capacity based on Kosciuszko Karst Area Management Plan
- Daily staff availability
- Visitor demand
- Number of overnight visitors
- Parking space
- Environmental impact

Facilities: Visitor Information Centre

Currently the Visitor Information Centre operates at its maximum capacity during high season (Summer and Easter holiday periods). The precinct plan proposes a new Visitor Information Centre that includes staff offices, interpretation, ticketing and information. The new Visitor Information Centre has approx. 255 square metres internal area. It is a moderate upgrade to the current Visitor Information Centre, but not too difficult to maintain during low season.

Facilities: New Cafe

The new cafe utilises the existing Visitor Information Centre building and its northern terrace area.

The existing Visitor Information Centre provides approx. 147 sqm area for both the kitchen

and internal dining area. The 390 sqm external northern terrace could accommodate at least 60 guests enjoying their lunch in a spacious setting.

Facilities: Thermal Pool

The precinct plan proposes upgrades to thermal pool to provide more usable space for day visitors. Improved access, shelter and facilities could not only make thermal pool much easier and safer to access, but could also increase its visitation opportunity and total carrying capacities.

Facilities: Day-trip parking

Currently there are approx. 120 total day-trip parking spaces allocated at each activity along the main loop road. The precinct plan proposes the improvement of Visitor Information Centre parking and 23 new parking spots at the day-use picnic area.

Facilities: Day-use picnic area

The precinct plan proposes new facilities upgrades at the current day-use picnic area: 5 new shade structures with picnic tables, 1 new toilet block and additional parking space for a maximum of 23 vehicles. The existing picnic shelter with gas bbq could be either rebuilt or upgraded to make the space more welcoming for visitors



South Glory Cave Yarrangobilly Precinct (JPW)



Northern Verandah and main entry Caves House 1901 wings (JPW)



Lounge Room Caves House 1901 wings (JPW)

Yarrangobilly Caves day trip; Low Season

Showcaves Capacity

During the low season (time outside of the December and Easter holidays), the showcave tours are usually limited to 2 x Jersey Cave tours and 2 x Jillabenan Cave tours per day. The bookings for adventure tours and other activities are drastically decreased.

Without including day visitors who may visit the caves without purchasing a ticket, the current maximum capacity for showcaves during low season is approx. 90 guests per day.

During high season and school holidays, additional tours are added that not only include extra Jersey Cave and Jillabenan Cave tours, but also include tours to North Glory Cave, Castle Cave and Harrie Wood Cave.

The maximum carrying capacity per tour of each cave is limited by the Yarrangobilly Karst Area Management Plan in order to protect and maintain the cave system. (South Glory maximum numbers are not included in KAMP).

Visitor experiences

The precinct plan allows for new cafe/dining, upgraded picnic area, new tour and education experiences, trails and new shelters to enhance the diversity of day-trip activities.

Apart from formalised activities such as cave tours, hiking, and the thermal pool experience, visitors are also likely to spend time relaxing in the natural reserve and enjoying a less hectic pace of life.

Proposed new trails are strategically placed to

allow guests to have easier access between activities and more freedom to explore the precinct.

Additional experiences that extend beyond the precinct to the broader Northern Kosciuszko National Park could be offered, as Yarrangobilly is an ideal base for exploring the park. These could include heritage tours, 4WD or mini bus tours, or additional adventure cave tours.

The main visitor experiences of the precinct include:

- Showcaves and adventure cave tours
- River walk and hiking trails
- Self-catered accommodation
- Unique cafe and dining experience
- Discovery tours and Interpretation
- Unique karst landscape
- Thermal pool
- Traditional Australian heritage architecture
- Modern Eco cottages in nature setting

Overnight accommodation impact

The precinct plan proposes a 95% increase of overnight accommodation capacity. New cabins and cottages combined with the Caves House allow for a maximum of 94 overnight guests.

Based on current 50% occupancy, an average of 47 out of 94 guests are projected to stay overnight at the precinct on a daily basis.

The increase in accommodation might affect the carrying capacities for day visitors, as half of the low season showcave tour capacity would be occupied by the overnight guests.

An option of increasing low season daily tours is worth considering to balance the increase of overnight visitors.

Day-trip activities

Fig 2.14 shows the low season day time activities for the precinct. The itinerary example shown in Fig 2.15 demonstrates a typical single day trip for a single traveller or a group of guests. Guests have the opportunity to join both cave tours and enjoy breakfast, lunch and dinner at the new cafe.

Yarrangobilly Caves day trip; High Season

Fig 2.16 shows the day activities during high season and school holidays. Additional cave tours are provided to cater for the influx of guests, as well as monthly discovery tours, Aboriginal cultural tours and children's play activities.

Fig 2.17-2.19 is a proposed 3-day itinerary for a family or group of friends. Guests have ample opportunities to experience different guided tours and activities daily.

If the guests are mainly coming for the caves, their daily activities will be similar as the activities will be structured around the guided tours at a specific time of a day. They would have opportunities and freedom to explore and enjoy other activities before and after the tours, but in general their time will be structured around a similar itinerary as other guests exploring the caves.

Guests who are not interested in the caves tour have the freedom to explore the precinct through hiking trails and enjoy the beautiful thermal pool. However currently there is no data to analyse this type of visitation.

Туре	Parking space	Internal area	Maximum no. guests
Existing	12 + overflow	147 sqm	30
Proposed	16 + overflow	255 sqm	70

Table 2.7 Visitor information centre existing and proposed capacities

Туре	Internal area	External area	Cafe tables	Maximum no. guests
Proposed cafe	147	390	20+	82

 Table 2.8
 New cafe proposed capacities

Туре	wc	Seats	Change room	Shelters	Pools	Onsen
Existing capacities	6	60	2	0	2	0
Proposed capacities	12	136	2	3	2	2

Table 2.9 New thermal pool area proposed capacities

Туре	Visitor Information Centre	Show caves	Other	Day-use picnic	Cafe
Existing parking	12	68	58	0	0
Proposed parking	11	68	58	11	16

Table 2.10 Day-use parking space capacity (Overflow not included)

Туре	Shelter	Picnic tables	BBQ	wc	Parking
Existing picnic area facilities	1	9	9	0	0
Proposed picnic area facilities	6	9	9	6	11

Table 2.11 Day-use picnic area existing and proposed capacities

Proposed trail	New trail length (m)
Thermal Pool Loop	400
New link trails	1173
Trail upgrade	740
Yarrangobilly Village to Yarrangobilly Caves trail	2250

 Table 2.12 Proposed pedestrian paths and trails.



Figure 2.12 Proposed low season day-trip activities (JPW)



Figure 2.13 Proposed low season 1 day itinerary (JPW)

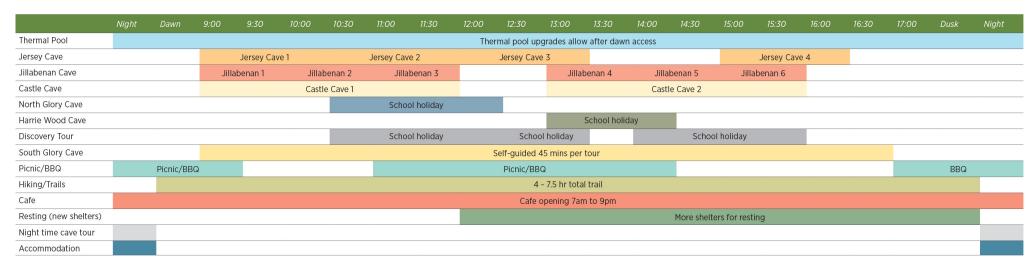


Figure 2.14 Proposed high season day-trip activities (JPW)

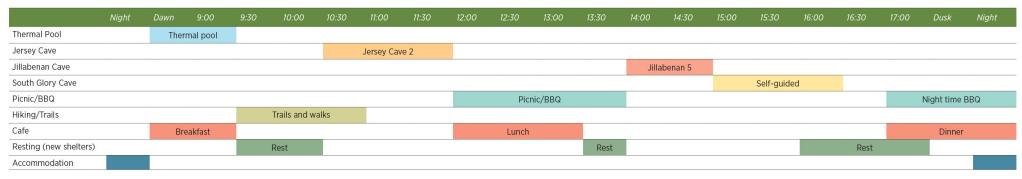


Figure 2.15 Proposed high season 3 day itinerary- Day 1 (JPW)

	Night	Dawn	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	Dusk	Night
Thermal Pool																	Thermal p	ool			
Castle Cave					Cast	le Cave 1															
Harrie Wood Cave												School hol	iday								
Picnic/BBQ																				BBQ	
Hiking/Trails															Trails and w	/alks					
Cafe		Bro	eakfast							Lunch									1	Dinner	
Resting (new shelters)																Rest					
Night time cave tour																					
Accommodation																					

Figure 2.16 Proposed high season 3 day itinerary- Day 2 (JPW)

	Night	Dawn	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	Dusk	Night
Thermal Pool			The	rmal pool																	
North Glory Cave							Scho	ool holiday													
Discovery Tour										Scho	ol holiday			Scho	ol holiday						
Picnic/BBQ											Picr	nic/BBQ									
Hiking/Trails					Trails and w	alks									Trails and w	/alks					
Cafe		Br	eakfast								Lunch										
Resting (new shelters)					Rest										Rest						
Accommodation																					

Figure 2.17 Proposed high season 3 day itinerary- Day 2 (JPW)

connect with Yans Crossing Trail (Would require 4.9kr	Opportunities for new visitor	experiences	
Cance trips Develop offering for seasonal Cance trips along Yarrangobilly River, between Yarrangobilly Staff training/ development to conduct Cance trips Povelop guided tubing experience from Yans Crossing Guided Caving Adventures Assisted caving experience using some technical caving techniques and/or accessing undeveloped caves Adventure Caving Passport – complete program progressively challenging caves over extended period Continue to build on/ develop show cave experience Quality experience of a cave environment and surrounds Educational opportunities Cance trips High quality tour guides offering exceptional educational tours Cycling/ Mountain Bike Riding 1/2 day & full day trips Targeted at low key, flatter and more leisurely trails. Drop off and picky up services provided—on existing trails (long plain, currango) Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to Varrangobilly Caves Eco Tours of precinct Intermittent tours based on individual staff skills and knowledge), with a focus on Staff training	Product/ Experience	Opportunities	Requirements
Village and the Caves Precinct when river levels allow. Develop guided tubing experience from Yans Crossing Guided Caving Adventures Assisted caving experience using some technical caving techniques and/or accessing undeveloped caves Adventure Caving Passport – complete program progressively challenging caves over extended period Continue to build on/ develops the develops and or accessing extended period Continue to build on/ develops the develops and or accessing extended period Continue to build on/ develops the develop and or accessing extended period Continue to build on/ develops the development and surrounds Educational opportunities Cang Plain Tours Walking tours Cance trips High quality tour guides offering exceptional educational tours Cycling/ Mountain Bike Riding Targeted at low key, flatter and more leisurely trails. Drop off and pick up services provided- on existing trails (long plain, currango) Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to Yarrangobilly Caves Eco Tours of precinct Intermittent tours based on individual staff skills and knowledge), with a focus on Staff training	Short walks and hikes		Extension of River Walk trail along Yarrangobilly River to connect with Yans Crossing Trail (Would require 4.9km of new trails along Yarrangobilly River) to create a 17km round trip
undeveloped caves Adventure Caving Passport – complete program progressively challenging caves over extended period Continue to build on/ develop show cave experience Quality experience of a cave environment and surrounds Educational opportunities Walking tours Canoe trips High quality tour guides offering exceptional educational tours Cycling/ Mountain Bike Riding I/2 day & full day trips Targeted at low key, flatter and more leisurely trails. Drop off and pick up services provided- on existing trails (long plain, currango) Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to Yarrangobilly Caves Eco Tours of precinct Intermittent tours based on individual staff skills and knowledge), with a focus on Educational proportion Staff training Equipment Marketing/ promotion Staff training/ development Marketing/ promotion Marketing/ promotion Marketing/ promotion Marketing/ promotion Staff training / development Marketing/ promotion Staff training / development Marketing/ promotion Marketing/ promotion Staff training / development Marketing/ promotion Marketi	Canoe trips	Village and the Caves Precinct when river levels allow.	Equipment, vehicles for pick-ups on one way trip
Show cave experience Educational opportunities Marketing/ promotion Long Plain Tours Walking tours 4WD vehicles Cance trips Staff training High quality tour guides offering exceptional educational tours Shuttle bus service Cycling/ Mountain Bike Riding ½ day & full day trips Shuttle bus service Targeted at low key, flatter and more leisurely trails. Staff training Drop off and pick up services provided- on existing trails (long plain, currango) Staff training Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to Yarrangobilly Caves Staff training	Guided Caving Adventures	undeveloped caves Adventure Caving Passport – complete program progressively challenging caves over	Equipment
Canoe trips High quality tour guides offering exceptional educational tours Cycling/ Mountain Bike Riding Y ₂ day & full day trips Targeted at low key, flatter and more leisurely trails. Drop off and pick up services provided- on existing trails (long plain, currango) Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to Yarrangobilly Caves Eco Tours of precinct Intermittent tours based on individual staff skills and knowledge), with a focus on Staff training Staff training	•		
Targeted at low key, flatter and more leisurely trails. Drop off and pick up services provided- on existing trails (long plain, currango) Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to Yarrangobilly Caves Eco Tours of precinct Intermittent tours based on individual staff skills and knowledge), with a focus on Staff training	Long Plain Tours	Canoe trips	
	Cycling/ Mountain Bike Riding	Targeted at low key, flatter and more leisurely trails. Drop off and pick up services provided- on existing trails (long plain, currango) Use the old highway as basis for cycling/walking access from Long Plain Road turnoff to	
	Eco Tours of precinct		Staff training

 Table 2.13 Opportunities for new visitor experiences

Opportunities for new visitor experiences (cont.)							
Product/ Experience	Opportunities	Requirements					
Wellness retreat packages	Offer multi day retreats such as yoga or meditation.	Specialised staff and/or external commercial licensed operators High quality accommodation and food offering					
Cultural/ Heritage Tours	Wolgalu cultural experience Heritage Tours	Opportunity to collaborate with local indigenous community Specialised staff and/or external commercial licensed operators					
Writers retreat	Offer multi day retreats	External commercial licensed operators High quality accommodation and food offering					
Commercial and Aboriginal Tour Operator partnership opportunities	Offer tour opportunities in Caves precinct and extend throughout Northern Kosicuszko	External tour operators					

Table 2.14 Opportunities for new visitor experiences cont.



Mountain Bike Tours Kosciuszko Summit Trail (NPWS)



Develop Show Cave Experience Jersey Cave (NPWS)



Wellness Retreat Packages (Google Images)

Facilities and Infrastructure Master plan

Infrastructure/Facility	Location	Plan	Current Condition	Proposed upgrades	Estimated no/ size/ m2 new works
Utilities					
Hydro Electric Power house	Power house	1		Screening with planting to decrease noise	520m2 landscape
Diesel Generator	Power house	2	New installed 9000L diesel tank	Two new diesel generators (potential to relocate) Screening with planting to decrease noise	planting
Nursery wastewater treatment area	Southern hill near Manager's House	3	Overall excellent condition, treats site wastewater	Visual screening with planting	
New solar array and battery system	Subject to NPWS	4		Investigate and maximise the opportunities of solar power	
Mobility & general access					
General footpath	Throughout main precinct	5	Disconnected pedestrian flow through site, guests required to walk on road through some areas	Provide pedestrian connections to day use picnic area and natural play area	122 linear m
				New footpath along Caves Entry Road	510 linear m

Table 2.15 Facilities infrastructure masterplan

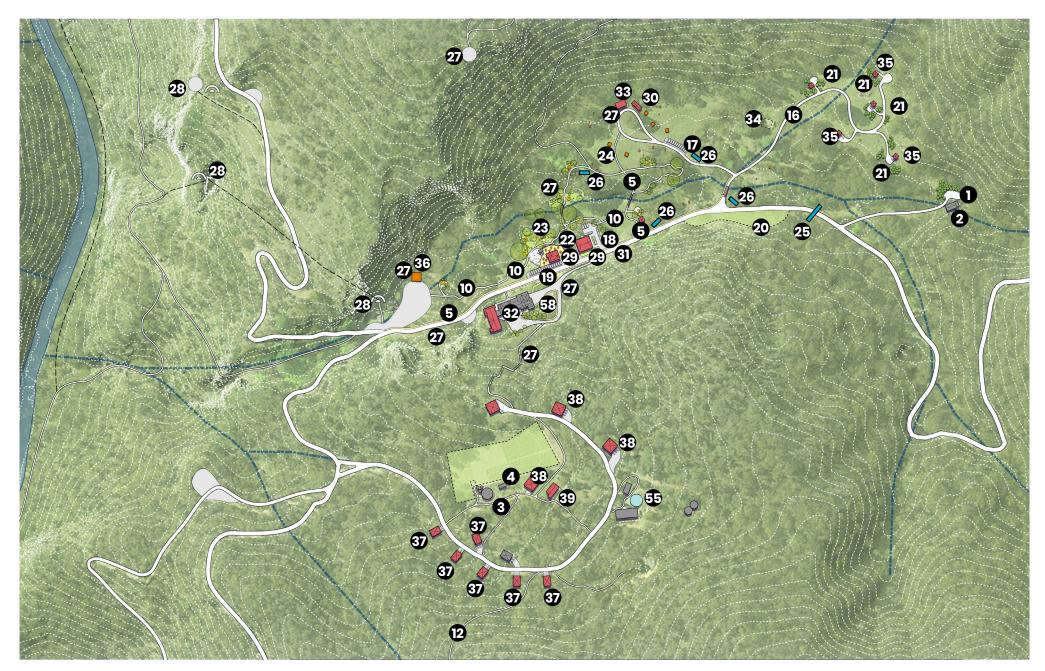


Figure 2.18 Facilities and infrastructure masterplan (JPW)

Infrastructure/Facility	Location	Plan	Current Condition	Proposed upgrades	Estimated no/ size/ m2 new works
			Rough track to lookout	Upgrade with steps/ board-walk and handrails	460m linear m
	Bluff lookout trail	6	No connection to picnic area or rest of precinct	Extend trail to connect with day use picnic area (gravel)	90m linear m
Walking and hiking trails	Guide's House to Caves House	7	No trail currently	Treetop or board-walk connection from current Guide's House to Caves House. Allow for steps, handrails, footings, lighting and interpretative signage	158 linear m
	Trails connecting 2 and 3 bed cottages	8	Existing gravel trail past nursery and Lyrebird Cottage	Extension of gravel paths	200 linear m
	Yarrangobilly Caves to Yarrangobilly Village hike	9	No route to connect two destinations	Extend river walk trail to connect with Yans Crossing Trail	5km
	Cultural trail	10	No trail currently	New dirt/ gravel walking track allow for interpretive signage, seating and landscaped educational spaces at intervals along trail	508 linear m
	Eco Pod Walking track	11	No route to connect two destinations	New dirt/ gravel walking track	
	Cottage walk	12	No trail currently	New natural surface trail with steps and handrails	475 linear m

 Table 2.16 Facilities infrastructure masterplan cont.

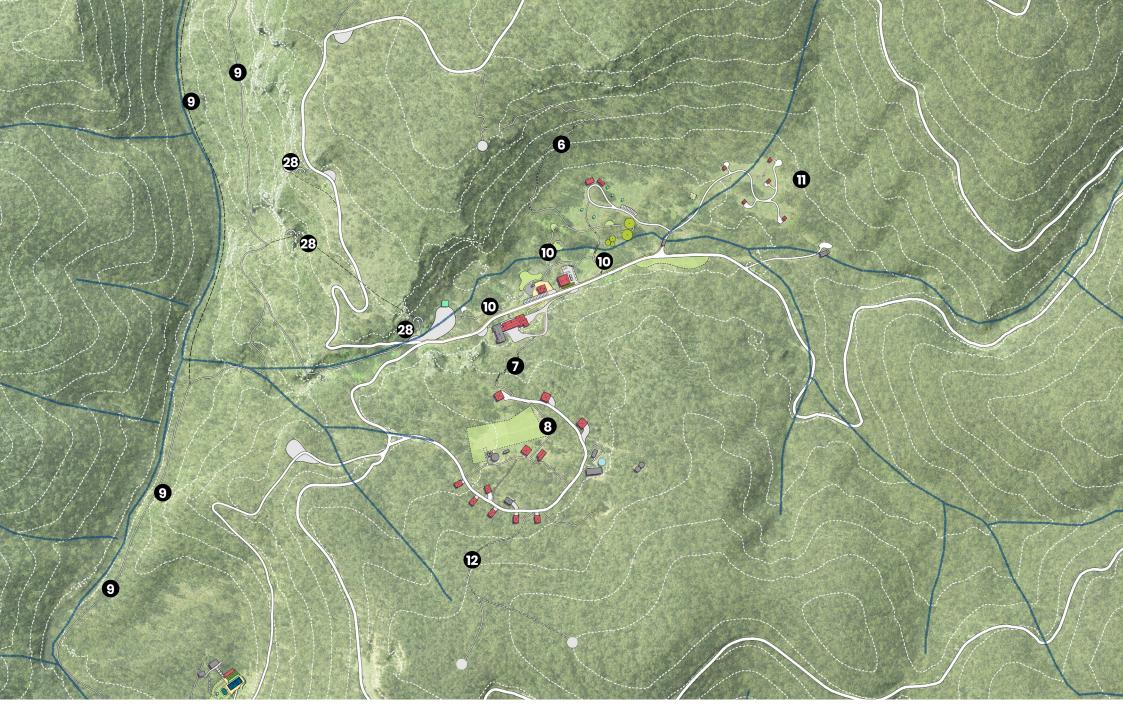


Figure 2.19 Facilities and infrastructure masterplan (JPW)

Infrastructure/Facility	Location	Plan	Current Condition	Proposed upgrades	Estimated no/ size/ m2 new works
	Thermal Pool Access		Steep and slippery for walking, narrow for vehicles	Resurface road to reduce slip and trip risk	650 linear m
Road network	Road	14/15	No turn around zone for bus/ maintenance vehicles	Add vehicle turn around zone (gravel)	284m2
	Eco Pods zone	16	No road currently	New gravel road, driveways and footpath to Eco Pods	362 linear m
Parking	Adjacent to loop road to day use picnic area	17	No existing parking for day use picnic area	New parking spaces provided	210m2
	Behind proposed new Visitor Information Centre	18	Gravel parking area behind existing toilets	Formalise into gravel parking area behind proposed Visitor Information Centre	422m2
	In-front of proposed cafe	19	Gravel parking in front of current Visitor Information Centre	Extend parking area	136m2 new space
	Overflow parking area	20	Grassed area along caves entry road	Remove bbq, retain as grassed area for overflow parking space	
Landscape					
Screening around new Eco Pods		21		Native plantings around Eco Pods for privacy	990m2
Cafe terrace		22	Semi-vacant space behind Visitor Information Centre with picnic tables and chairs; a generous view towards northern low ground	Outdoor cafe space (as part of the new proposed cafe)	390 m2 with min. 10 cafe tables
Caves house		58		Sealing carpark and upgrade to road leading to carpark	1345m2

 Table 2.17 Facilities infrastructure masterplan cont.



Infrastructure/Facility	Location	Plan	Current Condition	Proposed upgrades	Estimated no/ size/ m2 new works		
Cultural trail		23	Small natural play space below Visitor Information Centre	Extend play space to create natural adventure zone. Allow for play equipment, interpretation signage, lighting, landscaping. Retaining existing trees. Extend and refurbish existing stepped connection to visitor information centre (proposed cafe space).	1717m2		
Park Furniture							
Day use picnic area		24	5 existing picnic tables, 5 existing BBQs	Additional 5 covered picnic shelters with tables. Allow for lighting	5 no.		
Signage							
	Entrance signage	25	No welcome signage to precinct	New entry sign along Caves Entry Road	1		
	Directional signage	26	Good condition	Additional signage to new areas	4		
General Precinct Signage	Interpretative signage	27	Aged/ weather damaged	Develop integrated strategy for interpretative signage through precinct. Theme with heritage/cultural and environmental aspects of site	9		
	Cave interpretative signage	28	Aged/ damaged	Upgrade signage throughout show caves and self-guided caves	2		
Adaptation and use of e	Adaptation and use of existing buildings/ New buildings						
Visitor information Centre	Along Caves Entry Road	29	Operating at capacity	Convert into new cafe. Allow for kitchen, electricity, power, water, sewage, sullage, lighting, internal toilets, furniture and fit out.	147m2		
Toilet Block	Along Caves Entry Road	30	Good condition	Relocate toilet block to day use picnic area. Provide power, water, sewage connections, new footpath and paving surround, landscaping.	69m2		



Figure 2.20 Preliminary plan for Thermal Pool uprgades (JPW)

Infrastructure/Facility	Location	Plan	Current Condition	Proposed upgrades	Estimated no/ size/ m2 new works
New Visitor Information Centre	Along Caves Entry Road	31	-	Provide new building for Visitor Information Centre, including internal toilets, stuff offices and interpretation displays. Allow for electricity, power, water, sewage, new footpath and paving surrounds, landscaping	255m2
Caves House (1901 wings)	Along Caves Entry Road	32	Good condition, outdated kitchens	Refurbish to bring to standard of 1917 section. Upgrade bedroom furniture and kitchens	650m2
Caves House (both wings)		32	outdated laundry rooms	Upgrade housekeeping/ laundry areas	
Picnic amenities block	Day Use Picnic Area	33	Modified toilet block with picnic tables and BBQs	Demolish existing picnic amenities block. Allow for lighting, power, water, sullage and sewage connections, and interpretative signage	97m2
Picnic shelter	Eco Pods area	34	Older/ dated picnic shelter with picnic tables and BBQs, electricity and water supply	Demolish shelter	100m2
New Eco Pods	-	35	-	WABI 3.7 x 5.5m cabin, to include power and water tank and sullage connections, allow for car parking on site	5
New shelter South Glory Cave Exit	South Glory car park	36	-	New picnic shelter allow for lighting and seating, interpretative signage	1 no.
New 2 bed cottage	Near Lyrebird Cottage	37	-	2 bedroom cottage to include power and water tank and sullage connections, allow for car parking on site. Thermal insulation appropriate for cold conditions and to meet bushfire standards	6
New 3 bed cottage	Near Lyrebird Cottage	38	-	Cabin to include power and water tank and sullage connections, allow for car parking on site	4
NPWS Manager's Cottage	Near Lyrebird Cottage	39	Worn/ needs refurbishment	Refurbish Manager's House (3 beds, kitchen and bathroom)	136m2

 Table 2.19 Facilities infrastructure masterplan cont.

Infrastructure/Facility Location	Plan	Current Condition	Proposed upgrades	Estimated no/ size/ m2 new works
Thermal Pool				
Main Pool	40	Needs safety upgrades, deep, natural bottom, clear water	Add stepped entrance and sitting ledge around pool perimeter	229m2
Children's wading pool	41		Add stepped seating walls	50m2
		Disconnected, mixed materials	Extend paved area around pool- new paving	254m2
Dethurove	42/43/44/45		New pathways- concrete or stone	65m2
Pathways			New pathways and steps, gravel or deco	118m2
			Demolish pathways	160m2
	46/47/48	Lacking shade options	New picnic shade structures with picnic tables and chairs	2 no.
Furniture			New pool shade structure	61m2
		Pool seating worn/ tired	New pool benches	16
Structures existing	49	Existing change rooms and toilets	Repaint, new flooring, new internal furniture	
Structures New	50		New toilets	126m2
Landscape	51	Grass dry/ bare	Irrigate lawn area around pool with thermal spring water	317m2

 Table 2.20 Facilities infrastructure masterplan cont.

Natural water play area between pool and river	52	-	Create natural play zone utilising thermal water flows between pool and river	977m2
Onsen (optional)	52	-	Add two onsen huts along the river edge utilising thermal water flows and gas heaters Extend the natural lawn area and new footpath to the onsen huts	1303m2
			New pool fence	50m
Safety	53	No pool fence/ safety devices around pool	Other safety devices (life saving buoy, radio/ wifi communication)	
Lighting	54	No lighting in pool area	Develop lighting strategy to extend hours of pool use including low level path lighting, toilet and change room lighting and pool lighting	
Infrastructure Upgrade				
Waste transfer station	55	-	Based on preliminary information at this stage, location and detailed design subject to NPWS	1 no.
Electric Vehicle charging station	56	-	1 no. of EV charging station at each new parking area	3 no

 Table 2.21 Facilities infrastructure masterplan cont.

